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BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

EXAMINER

LEE, MICHAEL

| ART UNIT | PAPER NUMBER |
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2614

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,377

Applicant(s)

WAHLROOS, ESA

Examiner

M. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 14-18, 22 and 24 is/are allowed.
6) ☒ Claim(s) 1-7, 12-13, 19-21, 23, 25-34 is/are rejected.
7) ☒ Claim(s) 8-11 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.8.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-7, 12, 13, 19-21, 23, 26-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yifrach (5,329,320).

Regarding claim 1, Yifrach (5,329,320) discloses an instant replay system showing an antenna 11 for receiving a broadcast signal, which meets the receiving step as claimed, a input circuit 12 for demodulating RF signal into video and audio signals, which meets the converting step as claimed, an audio and video circuit 13 for transmitting the video and audio signal to a display 15 and speaker 14, respectively, which meets the transmitting step as claimed, a freeze button 32 for providing a capture command to logic 31, which meets the receiving step as claimed, and a RAM 30 for storing a video frame in response to the capture command, which meets the storing step as claimed, except the RAM is not a non-volatile memory as claimed. It is well known in the art that RAM memories can be made of non-volatile memories, such as FRAM (Ferroelectrics Random Access Memory) and NVRAM (Non-Volatile Random Access Memory). Since the RAM in Yifrach can be any conventional RAM, it would

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have been obvious to one of ordinary skill in the art at the time of the invention was made to employ FRAM or NVRAM as the non-volatile memory as claimed.

Regarding claim 2, the decompressor 24 in Yifrach converts a frozen picture signal into a television frame signal, which meets the converting step as claimed.

Regarding claim 4, the freezing and capturing operations in Yifrach can be repetitively operated.

Regarding claim 5, the decompressor 24 and audio and video circuit 13 can be repetitively operated to generate more than one picture frames by respectively pressing the freeze button. Hence, the converting step and the transmitting step are met by the decompressor 24 and circuit 13, respectively.

Regarding claim 6, Yifrach states that the storage device 30 stores both the video and audio signals when the freeze button 32 is pressed. The claimed receiving and storing steps are met by Yifrach because the digital audio and video signals in Yifrach are needed to be identified properly in order to be stored in the storage device 30.

Regarding claim 7, the playback mode in Yifrach meets the transmitting steps as claimed (see col. 5, lines 12-24).

Regarding claim 12, the decompressor 24 is a computing device.

Regarding claim 13, the freeze mode in Yifrach is operated during the reception of video signal.

Regarding claims 19-21, 23, in addition of rejection to claim 1, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to

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implement Yifrach's instant replay system by a computer software so that the system could be carried out by a conventional computer system which includes a central processing unit, a memory module for storing the software and an interface for coupling the computer system with the television receiver because software implementation is more cost effective than hardware implementation.

Regarding claim 26, in addition of above rejections, Yifrach further shows a terminal display (15) for displaying the captured image, except the application selection item as claimed. The examiner takes Official Notice that application selection function in a computer system is well known in the art. For instance, different images can be arbitrarily employed or selected as an application icon. The selection of the images would have been an obvious design choice. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the captured picture frame as an application selection item to perform the well known functions as claimed.

Regarding claim 27, Yifrach does not specify the reducing step as claimed. The examiner takes Official Notice that image reducing or enlarging operation is well known in the art. For instance, television format converters employ image size converter for converting one standard to another so that received image with different sizes can fit into the screen of a television receiver. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the reducing step into Yifrach so that different image sizes can fit into the display screen.

Regarding claim 28, the captured image in Yifrach inherently includes an icon because the captured image could be anything. For instance, it could be a television signal with a station logo on the bottom corners of the screen.

Regarding claims 29 and 30, Yifrach does not specify the displaying step for displaying the picture frame as an icon on a navigation bar. The examiner takes Official Notice that displaying different icons on a navigation bar is well known in the art in order to facilitate the user to recognize a particular task virtually. The icon selection would have considered an obvious design choice. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the captured frame image as an icon on a navigation bar to perform the well known functions as claimed.

Regarding claim 31, Yifrach does not specify the step of receiving a capture command from a mobile phone terminal. In any event, the freeze button 32 in Yifrach could be controlled by any means. For instance, it could be controlled by the user either remotely or locally. When controlled remotely, the controller could be any conventional remote control device such as a cellular phone. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ a cellular phone into Yifrach so that the freeze button could be controlled remotely.

Regarding claim 32, being in a computer system configuration, the freeze button 32 is considered part of a computer terminal.

Regarding claim 33, in addition of rejection to claim 31, the cellular phone could be substituted with a remote control or any conventional radio control device.

Regarding claim 34, the received video signal is accompanied with audio signal.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yifrach (5,329,320) as applied to claim 1 above, and further in view of Cuccia (6,295,094).

Regarding claim 3, Yifrach does not specify the monitoring step, the identifying step, and the using step as claimed. Cuccia, from the similar field of endeavor, discloses an instant replay system showing the monitoring step (col. 3, lines 55-57), the identifying step and the using step (col. 4, lines 12-19). By using such steps, MPEG encoded video signals can be replayed and captured efficiently since the steps are intended to locate the I-frames (complete data frames) of the incoming or stored video signal. Since the compressor 22 in Yifrach could be made any conventional compressor, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ a MPEG encoder as the compressor. When a MPEG encoder is employed in Yifrach, only I-frames can be captured into the RAM since only I-frames carry complete frame data. In order to recognize the I-frames, the steps as disclosed by Cuccia above would have to be utilized. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made, when a MPEG encoder is used as the compressor 22, to include the monitor step, the identifying step, and the using steps of Cuccia into Yifrach to perform the well known functions as claimed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Yifrach (5,329,320).

Regarding claim 25, Yifrach shows a means for receiving (11), a means for converting (12), a means for transmitting (13), a means for receiving (31), and means for storing (30).

Allowable Subject Matter

6. Claims 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 14-18, 22 and 24 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: Prior art does not teach or suggest the step of receiving information that associates an event and the portion of the digital audio stream, and the step of retrieving the portion of the digital audio stream from the memory when the event takes places as recited in claims 14, 22, and the dividing step, the generating step, the receiving step, the retrieving step as recited in claim 24.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schaefer et al. (6,490,000) shows a buffer.

Satake et al. (5,317,399) shows a freeze switch.

Inoue et al. (5,729,280) shows an instant replay system.

Russel et al. (4,855,813) shows a video frame capture means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number is **703-305-4743**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John Miller**, can be reached at **703-305-4795**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to be 'M. Lee', written in a cursive style.

M. Lee
Primary Examiner
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April 30, 2004